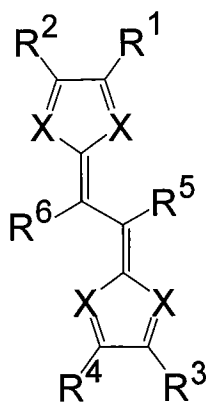


**AMENDMENTS TO THE CLAIMS:**

*Please amend the claims as follows:*

1-19. (Cancelled)

20. (Withdrawn) An electrode active material for an electrochemical device, comprising a compound having a structure represented by the general formula (1b):



where X is a nitrogen atom; each of R<sup>1</sup> to R<sup>4</sup> is independently a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; each of R<sup>5</sup> and R<sup>6</sup> is independently a linear or cyclic aliphatic group, or a hydrogen atom; said aliphatic group includes at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom, and a halogen atom.

21. (Cancelled)

22. (Currently amended) The secondary battery in accordance with claim 32, wherein said ~~compound is a~~ polymer compound ~~having~~ contains more than one structure represented by the general formula (1a).

23. (Withdrawn) The electrode active material in accordance with claim 20, wherein said compound is a polymer compound having more than one structure represented by the general formula (1b).

24. (Withdrawn) The secondary battery in accordance with claim 34, wherein said compound is a polymer compound having more than one structure represented by the general formula (2).

25. (Currently amended) The secondary battery in accordance with claim ~~[[22]]~~ 32, wherein said polymer compound has a polyacetylene chain or a polymethacrylate chain as a main chain.

26. (Withdrawn) The electrochemical device in accordance with claim 23, wherein said polymer compound has a polyacetylene chain or a polymethacrylate chain as a main chain.

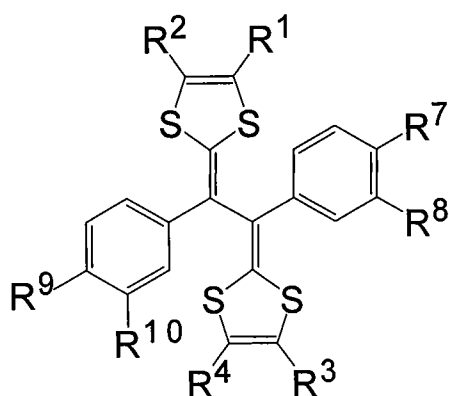
27. (Withdrawn) The secondary battery in accordance with claim 24, wherein said polymer compound has a polyacetylene chain or a polymethacrylate chain as a main chain.

28. (Previously presented) The secondary battery in accordance with claim 32, wherein the number of carbon atoms in the aliphatic group is in the range of 1 to 6.

29. (Withdrawn) The electrochemical device in accordance with claim 20, wherein the number of carbon atoms in the aliphatic group is in the range of 1 to 6.

30. (Withdrawn) The secondary battery in accordance with claim 34, wherein the number of carbon atoms in the aliphatic group is in the range of 1 to 6.

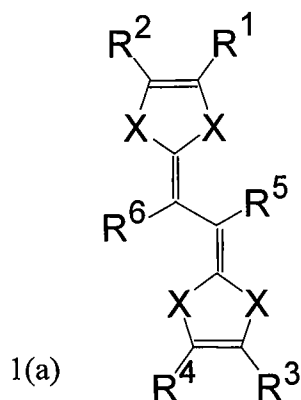
31. (Withdrawn) An electrode active material for an electrochemical device, comprising a compound having a structure represented by the general formula (2):



where each of R<sup>1</sup> to R<sup>4</sup> is hydrogen atom; one of R<sup>7</sup> and R<sup>8</sup> is a hydrogen atom and the other is a methyl group; and one of R<sup>9</sup> and R<sup>10</sup> is a hydrogen atom and the other is a methyl group.

32. (Currently amended) A secondary battery, comprising a positive electrode, a negative electrode and an electrolyte,

wherein at least one of said positive electrode and said negative electrode includes an electrode active material comprising a polymer compound having a structure represented by the general formula (1a):



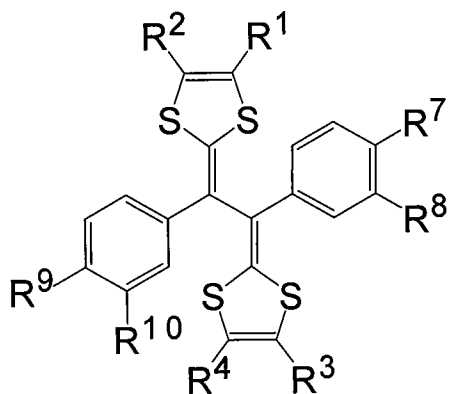
where X is a sulfur atom or an oxygen atom; each of R<sup>1</sup> to R<sup>4</sup> is independently a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; each of R<sup>5</sup> and R<sup>6</sup> is independently a linear or cyclic aliphatic group, or a hydrogen atom; said aliphatic group includes at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom, and a halogen atom, and

wherein any from the group consisting of R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> or R<sup>6</sup> is further bonded to another molecule in a polymer chain.

33. (Withdrawn) An electrochemical device, comprising a positive electrode, a negative electrode and an electrolyte,

wherein at least one of said positive electrode and said negative electrode includes an electrode active material in accordance with claim 20.

34. (Withdrawn) A secondary battery, comprising a positive electrode, a negative electrode and an electrolyte,  
wherein at least one of said positive electrode and said negative electrode includes an electrode active material comprising a compound having a structure represented by the general formula (2):



where each of  $R^1$  to  $R^4$  and  $R^7$  to  $R^{10}$  is independently a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; said aliphatic group includes at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom and a halogen atom.

35. (Previously presented) The secondary battery in accordance with claim 32, wherein said electrolyte comprises a solvent, and an anion and a cation that diffuse in said solvent, and said compound is capable of forming a coordinate bond with said cation through an oxidation-reduction reaction.

36. (Withdrawn) The electrochemical device in accordance with claim 33, wherein said electrolyte comprises a solvent, and an anion and a cation that diffuse in said solvent, and said compound is capable of forming a coordinate bond with said cation through an oxidation-reduction reaction.

37. (Withdrawn) The secondary battery in accordance with claim 34, wherein said electrolyte comprises a solvent, and an anion and a cation that diffuse in said solvent, and said compound is capable of forming a coordinate bond with said cation through an oxidation-reduction reaction.

38. (Previously presented) The secondary battery in accordance with claim 35, wherein said cation is a lithium ion.

39. (Withdrawn) The electrochemical device in accordance with claim 36, wherein said cation is a lithium ion.

40. (Withdrawn) The secondary battery in accordance with claim 37, wherein said cation is a lithium ion.

41. (Previously presented) The secondary battery in accordance with claim 32, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes a carbon material as a negative electrode active material.

42. (Withdrawn) The electrochemical device in accordance with claim 33, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes a carbon material as a negative electrode active material.

43. (Withdrawn) The secondary battery in accordance with claim 34, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes a carbon material as a negative electrode active material.

44. (Previously presented) The secondary battery in accordance with claim 32, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes, as a negative electrode active material, at least one selected from the group consisting of a lithium metal, a lithium-containing composite nitride and a lithium-containing composite titanium oxide.

45. (Withdrawn) The electrochemical device in accordance with claim 33, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes, as a negative electrode active material, at least one selected from the group consisting of a lithium metal, a lithium-containing composite nitride and a lithium-containing composite titanium oxide.

46. (Withdrawn) The secondary battery in accordance with claim 34, wherein said positive electrode includes said compound as a positive electrode active material, and said negative electrode includes, as a negative electrode active material, at least one selected from the group consisting of a lithium metal, a lithium-containing composite nitride and a lithium-containing composite titanium oxide.

47. (Previously presented) The secondary battery in accordance with claim 32, wherein said negative electrode includes said compound as a negative electrode active material, and said positive electrode includes a metal oxide material as a positive electrode material.

48. (Withdrawn) The electrochemical device in accordance with claim 33, wherein said negative electrode includes said compound as a negative electrode active material, and said positive electrode includes a metal oxide material as a positive electrode material.

49. (Withdrawn) The secondary battery in accordance with claim 34, wherein said negative electrode includes said compound as a negative electrode active material, and said positive electrode includes a metal oxide material as a positive electrode material.

50. (Previously presented) The secondary battery in accordance with claim 32, wherein, when said compound is used as an electrode active material, a conductive material is mixed into the electrode active material.

51. (Withdrawn) The electrochemical device in accordance with claim 33, wherein, when said compound is used as an electrode active material, a conductive material is mixed into the electrode active material.

52. (Withdrawn) The secondary battery in accordance with claim 34, wherein, when said compound is used as an electrode active material, a conductive material is mixed into the electrode active material.

53. (Previously presented) The secondary battery in accordance with claim 32, wherein, when said positive electrode includes said compound as a positive electrode active material, one of the following is used as the negative electrode material of said negative electrode: a carbon material, a lithium metal, a lithium-containing composite nitride, a lithium-containing composite titanium oxide, a composite material of tin and carbon, and a composite material of tin and another metal.

54. (Withdrawn) The electrochemical device in accordance with claim 33, wherein, when said positive electrode includes said compound as a positive electrode active material, one of the following is used as the negative electrode material of said negative electrode: a carbon material, a lithium metal, a lithium-containing composite nitride, a lithium-containing composite titanium oxide, a composite material of tin and carbon, and a composite material of tin and another metal.

55. (Withdrawn) The secondary battery in accordance with claim 34, wherein, when said positive electrode includes said compound as a positive electrode active material, one of the following is used as the negative electrode material of said negative electrode: a carbon material, a lithium metal, a lithium-containing composite nitride, a lithium-containing composite titanium oxide, a composite material of tin and carbon, and a composite material of tin and another metal.

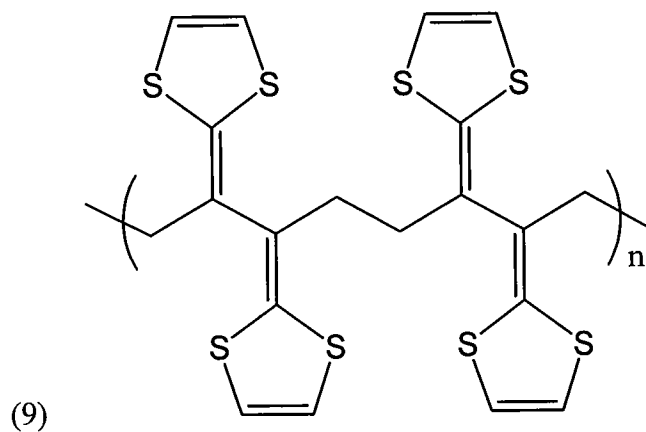
56. (Cancelled)

57. (Withdrawn) The electrochemical device in accordance with claim 33, wherein said electrochemical device comprises one of a secondary battery, a primary battery, an electrolytic capacitor, a sensor and an electrochromic device.

58. (Cancelled)

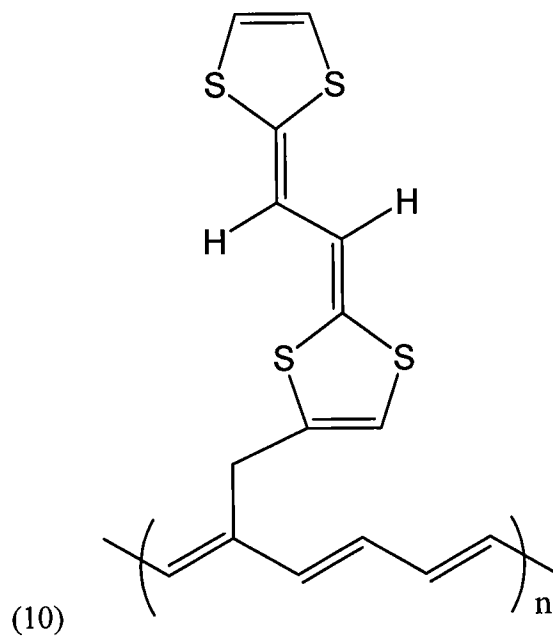


59. (New) The secondary battery in accordance with claim 32, wherein said polymer compound is a compound of general formula (9):



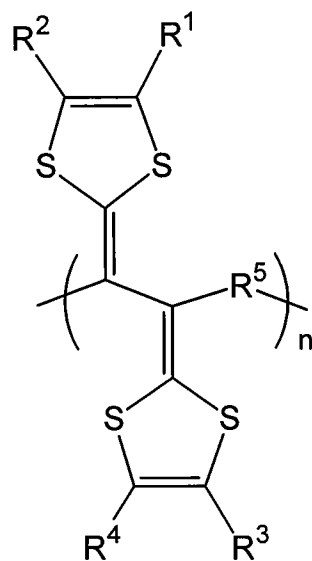
where n is not less than 1.

60. (New) The secondary battery in accordance with claim 32, wherein said polymer compound is a compound of general formula (10):



where n is not less than 1.

61. (New) The secondary battery in accordance with claim 32, wherein said polymer compound has the following general formula:



where *n* is not less than 1.